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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,881	09/29/2003	Harry Schilling	5858-01300	9212
35617	7590	11/29/2006	EXAMINER	
DAFFER MCDANEIL LLP			TRAN, KHAI	
P.O. BOX 684908			ART UNIT	
AUSTIN, TX 78768			PAPER NUMBER	
			2611	

DATE MAILED: 11/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/674,881	Applicant(s) HARRY SCHILLING	
	Examiner KHAI TRAN	Art Unit 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>10/06/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the multiplexer must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to because empty boxes should have descriptive labels. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended

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replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claims 1-17 are objected to because of the following informalities: Appropriate correction is required.

The term "characterized" in the claims 1-17 should be changed to --wherein--.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

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applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-7, 10-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Kleinerman et al (U.S. Pat 6,470,047).

Regarding claim 1, Kleinerman et al disclose a device for wideband transmission for digital signals between at least one first unit and a second unit mobile along a predetermined path relative to the first unit (see Figure 2), the first unit comprising: a data source (34) for generating serial data stream (Col. 10, lines 5-8); a transmitter (32) for generating electrical signals from the data stream from the data source (Col. 10, lines 24-27). It is inherent that a transmitter conductor array, antenna, for conducting the electrical signals generated by the transmitter is necessarily present in the teachings of Kleinerman et al 's system since the signals are being transmitted and a conductor array is needed for transmission. Furthermore, Kleinerman et al disclose a second unit with a receiver (50), for receiving the signals, tapped by the receiving antenna (Col. 10, lines 41-44). It is inherent that a receiving antenna for tapping electrical signals in near field of the transmitter conductor array is necessary present in the Kleinerman et al's system since an antenna is needed for reception. Kleinerman et al also disclose a data sink (56, 58,59, and 60, for subsequent processing of the signals received by the receiver. Kleinerman et al further disclose a coding means (an encoder 36) being provided between the data source and the transmitter (TX), which performs a digital coding of the data stream in such a way that data is transmitted with a minimum of

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errors via the transmitter, the transmitter conductor array, the receiving antenna, and the receiver (Col. 10, lines 5-9).

Regarding claim 2, Kleinerman et al also disclose that a decoder means (58, 60) is provided between the receiver and the data sink.

Regarding claim 3, Kleinerman et al disclose that the coding means is designed for conversion of spectral characteristics of the data stream in such that a way the power can be optionally increased or decreased within predetermined spectral ranges (Col. 10, lines 10-34).

Regarding claim 4, Kleinerman et al disclose that a coding function of the coding means can be dynamically adjusted (Col. 10, lines 19).

Regarding claims 5-6, Kleinerman et al disclose that the coding means is so designed that it contributes additional redundancy into the data stream; and the coding means replace data values at defined position in the data stream (Col. 3, lines 8-21).

Regarding claim 7, Kleinerman et al disclose that the coding means is designed for increasing or reducing a data rate in the serial data stream (Col. 23, lines 53-60).

Regarding claim 10, Kleinerman et al disclose that the coding means comprises means for storing data and for outputting data at different data rates to the transmitter (Col. 7, line 65 to Col. 8, line 24).

Regarding claim 11, Kleinerman et al disclose that the device comprises a decoder means (58, 60) in the receiver (see Col. 11, line 57 to Col. 12, line 11).

Regarding claim 12, Kleinerman et al disclose that the coding means or decoder means comprises means for clock regeneration (see Figure 5).

Regarding claims 13-14, Kleinerman et al disclose that a filter in the receiver or transmitter (Col. 4, lines 50-54).

Regarding claim 15, Kleinerman et al disclose that a microcontroller is provided for controlling and diagnosing the device (Col. 25, lines 9-14).

Regarding claim 16, Kleinerman et al disclose that the device is self-learning and dynamically adapts itself to respective conditions of operation (Col. 4, lines 50-54).

Claim 17 is similar to claim 1. Therefore, claim 17 is rejected under a similar rationale.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kleinerman et al in view of Hanada et al (U.S. Pat. 6,980,539).

Regarding claim 8, Kleinerman et al fail to disclose that the coding means comprises a multiplexer for incorporating further serial data stream of the data source.

Hanada et al disclose the coding means comprises a multiplexer for incorporating further serial data stream of the data source (see Col. 8, lines 19-30, illustrating that the transmission data sequence entered from the transmission data generator 11 is encoded by the encoder 12 and modulated by the data modulator 13. Then, the encoded and modulated transmission data sequence is multiplexed with the

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pilot symbol at the multiplexer 14, and the serial to parallel conversion is applied by the serial/parallel converter 15 (step S1). In a serial to parallel converted sequence of N/SF data symbols, each data symbol is copied as many as the number of symbols equal to the short code sequence length (chip length) by the copier 16, and these copies are arranged on the frequency axis (step S2) to obtain the first data symbol sequence). It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the multiplexer in Kleinerman et al's transmitter as taught by Hanada et al in order to prevent degradation of correlated outputs and preventing difficulty in demodulation.

Regarding claim 9, the use of encipher in the coding means is well known in the art. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the encipher in Kleinerman et al's transmitter in order to prevent fraud prior to transmitting signal to a receiver.

Double Patenting

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321© may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-17 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-4 of copending Application No. 10/674,876 and copending and claims 1-8 of Application No. 10/674,877. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1-17 of the instant application merely broadens the scope of the claims 1-4 of the Application No. 10/674,876, and claims 1-8 of Application No. 10/674,877 by eliminating the elements and their functions of claim 1 of the U.S. Patent. It has been held that the omission an element and its function is an obvious expedient if the remaining elements perform the same function as before. *In re Karlson*, 136 USPQ 184 (CCPA). Also note *Ex parte Rainu*, 168 USPQ 375 (Bd.App.1969); omission of a reference element whose function is not needed would be obvious to one skilled in the art.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Alder (U.S. Pat. 5,745,082) discloses a radiation sensor.

Greanias et al (U.S. Pat. 5,007,085) disclose a remotely sensed personal stylus.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHAI TRAN whose telephone number is (571) 272-3019. The examiner can normally be reached on 7:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JAY PATEL can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Primary Examiner
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November 26, 2006